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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/598,226

08/22/2006

Robert Hendrikus Margaretha Van Veldhoven

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

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BRIARCLIFF MANOR, NY 10510

EXAMINER

JEANGLAUDE, JEAN BRUNER

ART UNIT

PAPER NUMBER

2819

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

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**Office Action Summary**

Application No.

10/598,226

Applicant(s)

VAN VELDHOFEN, ROBERT  
HENDRIKUS MARGARE

Examiner

Jean B. Jeanglaude

Art Unit

2819

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 22 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5-14-07</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

#### ***Abstract***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure. *The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words.* It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

#### **Content of Specification**

- (a) Title of the Invention: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) Cross-References to Related Applications: See 37 CFR 1.78 and MPEP § 201.11.

- (c) Statement Regarding Federally Sponsored Research and Development: See MPEP § 310.
- (d) The Names Of The Parties To A Joint Research Agreement: See 37 CFR 1.71(g).
- (e) Incorporation-By-Reference Of Material Submitted On a Compact Disc: The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.
- (f) Background of the Invention: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are solved by the applicant's invention. This item may also be titled "Background Art."

- (g) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (h) Brief Description of the Several Views of the Drawing(s): See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (i) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.

- (j) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (k) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).
- (l) Sequence Listing. See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

#### Claim Objection

Claims 1 – 6 are objected to because of reference characters which are enclosed within parentheses. It is suggested to remove the reference characters in the

claim to avoid confusion although it is proper to use reference characters corresponding to elements recited in the detailed description of the drawings and used in conjunction with the recitation of the same element or group of elements in the claims should be enclosed within parentheses so as to avoid confusion with other numbers or characters which may appear in the claims. See MPEP § 608.01(m).

#### Document Request

It is noted that documents are submitted with 371 applications with the application. A hardcopy of the document was not received by the office. It is suggested to submit a hard copy of the document.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 - 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Der Zwan et al. (USPGPUB 2002/0071578) in view of Billoud (US Patent Number 5,638,304).

4. Regarding claim 1, Van Der Zwan et al. discloses a device (figs. 1 – 5) for digitally processing a sensor signal (the signal from the element 1) from a sensor (1, figs. 4, 5) the sensor signal comprising an information signal component representing information and a further signal component not representing information (admitted by the applicant see specification page 1, lines 12 – 15), the device comprising a signal

conditioning circuit (9, figs. 4, 5) for receiving the sensor signal and outputting a conditioned sensor signal (see figs. 4, 5), and an analog to digital converter (33) for converting the conditioned sensor signal to a digital sensor signal to be processed, (elements 9, 5, 7, 8 form the ADC) (see abstract). Van Der Zwan et al. does not specifically disclose a device in which the signal conditioning circuit comprising an analog feedback loop having a loop filter having a transfer function having a first transfer function component for enhancing the information signal component and a second transfer function component for reducing the further signal component. However, Billoud, in a related field, discloses a device that comprises a conditioning circuit (the filter, the adder and the mixer form the conditioning circuit) (fig. 2) that comprises an analog feedback loop (the loop made by the filter) having a loop filter having a transfer function having a first transfer function component for enhancing the information signal component and a second transfer function component for reducing the further signal component (col. 2, line 55 to col. 3, line 2)[ as noted in fig. 2, each filter has a transfer function. The device is used to actively damp vibration, by doing so the signal component is reduced). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Van Der Zwan et al.'s system with that of Billoud in order to actively damp vibration.

5. Regarding claim 2, Van Der Zwan et al. discloses a device (figs. 1 – 5) wherein the analog feedback loop (fig. 2) comprises a summing element (the adder) for receiving the sensor signal and an output signal of the loop filter (see paragraph 0009).

6. The combination of Van Der Swan et al and Billoud would achieve the limitation of claim 4 since Van Der Swan et al.'s device (figs. 4, 5) enhances an AC signal component and reduces a DC component (see figs. 4, 5) and Billoud discloses in fig. 5 a device that has first transfer function component and the second transfer function component (the filtering modules 38br and 38bl produce the transfer functions). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Van Der Zwan et al.'s system with that of Billoud in order to actively damp vibration.

7. The combination of Van Der Swan et al and Billoud would achieve the limitation of claim 5, because Van Der Swan et al. discloses a device (figs. 4, 5) wherein the sensor (1) is a microphone unit (1) having an amplifying element, in particular an electret condenser microphone having a field effect amplifying element (figs. 4, 5) and Billoud as discussed above discloses a second transfer function component is arranged for said reducing by providing a bias current to the amplifying element ((col. 2, line 55 to col. 3, line 2)[ as noted in fig. 2, each filter has a transfer function. The device is used to actively damp vibration, by doing so the signal component is reduced). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Van Der Zwan et al.'s system with that of Billoud in order to actively damp vibration.

8. Regarding claim 7, Van Der Swan et al. discloses an audio device (figs. 4, 5), in particular a mobile phone or a hearing aid, comprising a device for digitally processing a

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sensor signal from a sensor (1) and a microphone unit (1) as the sensor (see figs. 4, 5).

9. The combination of Van Der Swan et al. and Billoud would achieve the same end result as claimed in claim 3 since Billoud discloses the first and second transfer functions that would enhance in band signal components and reduce interference signal component (see col. 1, lines 47 – 60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Van Der Zwan et al.'s system with that of Billoud in order to actively damp vibration.

10. The combination of Van Der Swan et al. and Billoud would achieve the same end result as claimed in claim 6 since Billoud discloses a device (fig. 2), wherein the signal conditioning circuit (the filter, the adder and the mixer form the conditioning circuit) (fig. 2) comprises a first analog feedback loop (14<sub>2</sub>) from a first output, which first loop includes a first loop filter (14<sub>2</sub>) coupled to a first summing element (the adder), and a second analog feedback loop (fig. 2) from a second output (), which second loop includes a second loop filter (18<sub>1</sub>) coupled to a second summing element (the connecting point), both outputs providing a differential output signal (figs. 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Van Der Zwan et al.'s system with that of Billoud in order to actively damp vibration.

#### Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

12. Billoud (US Patent Number 5,638,304) discloses a method and apparatus for active damping of vibration.
13. Kobayashi et al. (US Patent Number 5,386,372) discloses vibration/noise control system for vehicles.
14. Van Der Zwan et al. (US PG PUB 2002/0071578) discloses an ADC with integrated biasing for a microphone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean B. Jeanglaude whose telephone number is 571-272-1804. The examiner can normally be reached on Monday - Friday 7:30 A. M. - 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rexford Barnie can be reached on 571-272-7492. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jean Bruner Jeanglaude  
Primary Examiner  
July 24, 2007